6. In travelling over the Canadian Pacific Railway from Ottawa to Montreal, a distance of 100 miles, a person observes by his watch that he passes a mile-stone every 3 minutes, and a telegraph post every 6 seconds. If the train is going uniformly, find the number of telegraph posts passed over.

7. A father gave his two children, James and Lucy, $8.60 and $6.80 respectively, to buy luncheons for their holiday party (the luncheons all to be of the same size and as costly as possible). James was to invite the boys so that there would be one boy for each luncheon purchased with his money, and Lucy the girls, with a similar understanding. How many of each were invited?

8. Suppose a bin 5 ft. long, 5 ft. wide, and five ft. high to hold exactly 100 bush. grain; find the height of a bin $12\frac{1}{2}$ ft. sq. that will hold 750 bushels.

9. A school of 50 children is kept open 44 weeks during the year and 5 days during the week. The children pay nothing for the days they attend, but forfeit two cents for every day they are absent. At the end of the year the payments for absence amounted to twenty-five dollars; find the average daily attendance.

10. A man dying left his property to be divided among his widow, 3 sons and 4 daughters, as follows:—the widow to get half as much again as a son, and twice as much as a daughter (also one twenty-fifth was to be deducted for expenses). It was found that each daughter received $1,800. How much was his property worth?

11. A father and son by working 9 hours a day can finish a piece of work in 8 days, the father doing twice a much work as the son. How many hours a day would the son alone have to work to finish a piece of work five times as large in 90 days?

12. If by selling a cap for $2.50 I gain $\frac{1}{8}$ of the cost price, what fraction of the cost would represent my gain had I sold it for three dollars?

13. Divide 620 marbles among James, John, Tom and Alex., so that for every 2 James gets, John may get 3, for every 2 John gets Tom may get 5, and for every 2 Tom gets, Alex. may get 7.

14. A can do a piece of work in 5 hrs., B in 6, and C in 8. A works at it by himself in $1\frac{1}{2}$ hrs., then B by himself $2\frac{1}{3}$ hrs. How long will it take C to finish the work?

15. If 3 men, or 4 women, or 5 children, can be boarded a week for $7.20; how much would it cost to board a man, his wife and 4 children for 13 weeks?

16. A owns $\frac{7}{7}$ of a potato plot and B the remainder. When the potatoes are dug in the fall it is found that one-third of the difference between their shares is 42 bush. 2 pks. Find how many bush. belong to B

17. A merchant has 9 times $\frac{8\frac{3}{5}-5\frac{3}{8}}{8\frac{3}{5}+5\frac{3}{8}}$ of $\frac{4\frac{3}{7}}{7\frac{3}{7}} \div \frac{12}{91}$ acres of land. If $1\frac{3}{4}$ of $\frac{1}{2\frac{1}{10}} \times \frac{5}{16}$ of $6\frac{3}{5}$ of an acre of it be sold for three thousand six hundred and fifty guineas, find the remainder in $ and c. (1s = 24$\frac{1}{2}$ c.)

18. The width of a large hall is $\frac{2}{3}$ its length, and the distance round its walls is 112 feet. Find the difference in cost between carpeting it with carpet 21 inches wide at 87$\frac{1}{2}$ cts. a yard, and with carpet 35 inches wide at $1.25 a yard.

19. Mr. Jones has a $\frac{9}{11}$ interest in a mine. If he sell $\frac{9}{11}$ of his interest, what decimal will represent his interest in the mine then?

20. At the first quarterly examination $\cdot 425$ of the children were examined in arithmetic, $\cdot 2\dot{7}$ in history, $\cdot 14\dot{6}\dot{9}$ in grammar, and the remaining 41 in reading. How many children were in the school?

21. The yearly sales of a general merchant amounted to twenty-nine thousand one hundred dollars. On groceries which formed one-fourth of the sales he made a profit of 20%; on boots and shoes which formed one-fifth of the sales he made a profit of 30%; and on dry goods which formed the remainder he made a profit of 33$\frac{1}{3}$%. How much did the merchant make during the year?

22. A liquor-dealer bought a barrel of beer for twelve dollars and twenty cents and retailed it at 5c. a pint. Find his gain per cent.

23. Fanny put $204.40 in the Postoffice Savings Bank on January 17th, 1884, for which she would get interest at 4%. How much did she receive from the bank when she withdrew it March 14th, 1885?

24. Four men hired a pasture for $45.00. The first man put in 5 cows for 6 weeks, the second 4 cows for 7 weeks, the third 3 cows for 8 weeks, and the fourth 2 cows for 9 weeks. How much should each pay of the $45.00?

25. Find the cost of building a side-walk 4 ft. wide, on both sides of a street, a quarter of a mile long, with 3-inch plank, and costing $8.00 a thousand.

26. What fraction of the distance round the earth will represent the width of the North-Temperate Zone?

27. Find the cost of plastering the walls of a School-room 33 feet long, 18 feet wide, and 11 feet high,—making allowance for 6 windows each 6 ft. by 3$\frac{1}{2}$ ft,, two doors reaching to the floor, each 7 ft. by 3$\frac{1}{2}$ ft., and wainscoting round the room 1$\frac{1}{2}$ ft. high,—at 18 cents a yard.

(Solutions to the above will be published next week.)

Examination Papers.

SOUTH GREY PROMOTION EXAMINATION.

20th FEBRUARY, 1885.

ARITHMETIC.

CLASS III TO IV.

1. I buy 72 barrels of flour at $45 for 8 bbls., and I sell them a $17 for 3 brls. Find how much I gain or lose.

2. I buy two dozen oranges, and sell them so that in gaining 40 cents, I receive as much for 2 as I paid for 3. Find the original cost.

3. Find the amount of the following bill of goods:—

3 lbs. Coffee @ $0.31
6$\frac{1}{2}$ lbs. Tea @ $0 60
16 yds. Print @ $0.11
12 yds. Tweed @ $1.25
8 lbs. Sugar, at 10 lbs. for $1.00.

4. Find the price of 1555 lbs hay at $7.00 per a ton of 2000 lbs.

5. Divide 1 furlong into 11 equal parts, and express one of these parts in per yds., ft. and inches.

(Accuracy and neatness of work should receive special credit.)

GEOGRAPHY.

CLASS III TO IV.

1. Name all the railways in the county of Grey, and the principal stations on each.

2. Draw an outline map of Ontario, locating the chief rivers and cities.

3. From what places are the following articles obtained:—Codfish, sealskins, coal, iron, copper, silver, cotton, tobacco, rice, sugar-cane, salt, pepper, nutmegs.

4. *What* and *where* are Good Hope, St. Louis, Amherst, Jamaica, Goderich, Durham, New Orleans, Brandon, Montreal, Liverpool, Cayenne. Rhine, Malta, Alps, Nile, Slave, Race, Trent, Ceylon, Edinburgh.

5. Explain clearly what cataract and rapids are, and name two celebrated ones of each, in Canada.

GRAMMAR.

CLASS III TO IV.

1. State to which part of speech each of the following words belong:—(*a*) Oft I had heard of Lucy Grey. (*b*) Better than grandeur is a healthy body.

2. Give the plurals of:—Two, fife, roof, duty, pea.

3. Divide the following sentences into subject and predicate, and parse the words in italics:—

(*a*) The *little* old white *man* with a short gun, *has* a *dog with* a bobtail.

(*b*) Did *you* find my book?

4. Correct:—"Each book and slate were in their place." "It is not me was to do it." "The boy who you saw, has went home." "Where's them other fellows." "John is the oldest of the two." "Let you and I try to carry it."

DRAWING.

CLASS III TO IV.

1. Draw a vertical line 3 inches in length. Trisect it. Draw another line parallel to the first, and one inch distant. Trisect it. Connect the two points of trisection by horizontal lines. Bisect each side of the squares thus formed. Connect the points of bisection by straight lines forming a second set of squares.

2. Draw a rosette to illustrate symmetrical arrangements about a centre.